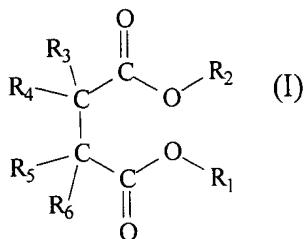


## AMENDMENTS TO THE CLAIMS

Please cancel claims 39 and 40 without prejudice or disclaimer.

Please amend claims 1, 6, 19, 29-30, and 35 as follows.

1. (Currently amended) A solid catalyst component for the polymerization of olefins  $\text{CH}_2=\text{CHR}$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising Mg, Ti, halogen and an electron donor selected from succinates of formula (I):



wherein the radicals R<sub>1</sub> and R<sub>2</sub>, equal to or different from each other, are a C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals R<sub>3</sub> to R<sub>6</sub> equal to or different from each other, are hydrogen or a C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals R<sub>3</sub> to R<sub>6</sub> which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when R<sub>3</sub> to R<sub>5</sub> are contemporaneously hydrogen, R<sub>6</sub> is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, arylalkyl and alkylaryl groups having from 3 to 20 carbon atoms.

2. (Previously Amended) The catalyst component according to claim 1 in which the electron donor of formula (I) is selected from those in which R<sub>1</sub> and R<sub>2</sub> are C<sub>1</sub>-C<sub>8</sub> alkyl, cycloalkyl, aryl, arylalkyl or alkylaryl groups.

3. (Previously amended) The catalyst component according to claim 2 in which R<sub>1</sub> and R<sub>2</sub> are selected from the group consisting of primary alkyls.

4. (Previously amended) The catalyst component according to claim 1 in which the electron donor of formula (I) is selected from those in which R<sub>3</sub> to R<sub>5</sub> are hydrogen and R<sub>6</sub> is a branched alkyl, cycloalkyl, aryl, arylalkyl or alkylaryl radical having from 3 to 10 carbon

atoms.

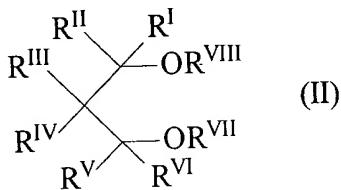
5. (Previously amended) The catalyst component according to claim 4 in which R<sub>6</sub> is a branched primary alkyl group or a cycloalkyl group having from 3 to 10 carbon atoms.
6. (Currently amended) The catalyst component according to claim 1 in which the electron donor of formula (I) is selected from those in which at least two radicals from R<sub>3</sub> to R<sub>6</sub> are different from hydrogen and are selected from the group consisting of C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl and alkylaryl groups optionally containing heteroatoms.
7. (Previously amended) The catalyst component according to claim 6 in which the two radicals different from hydrogen are linked to the same carbon atom.
8. (Previously amended) The catalyst component according to claim 6 in which the two radicals different from hydrogen are linked to different carbon atoms.
9. (Previously amended) The catalyst component according to claim 8 in which the succinate of formula (I) is selected from the group consisting of diethyl 2,3-diisopropylsuccinate, diisobutyl 2,3-diisopropylsuccinate, di-n-butyl 2,3-diisopropylsuccinate, diethyl 2,3-dicyclohexyl-2-methylsuccinate, diisobutyl 2,3-dicyclohexyl-2-methylsuccinate, diisobutyl 2,2-dimethylsuccinate, diethyl 2,2-dimethylsuccinate, diethyl 2-ethyl-2-methylsuccinate, diisobutyl 2-ethyl-2-methylsuccinate, diethyl 2-(cyclohexylmethyl)-3-ethyl-3-methylsuccinate, and diisobutyl 2-(cyclohexylmethyl)-3-ethyl-3-methylsuccinate.
10. (Previously amended) The catalyst component according to claim 1 in which the succinates are used in the form of pure stereoisomers.
11. (Previously amended) The catalyst component according to claim 1 in which the succinates are used in the form of mixtures of enantiomers, or mixture of diastereoisomers and enantiomers.
12. (Previously amended) The catalyst component according to claim 9 in which diethyl 2,3-diisopropylsuccinate, diisobutyl 2,3-diisopropylsuccinate and di-n-butyl 2,3-diisopropylsuccinate are used as a pure *rac* or *meso* forms, or as mixtures thereof.
13. (Previously amended) The catalyst component according to claim 1 wherein the Ti compound has at least a Ti-halogen bond and wherein the succinate of formula (I) is supported on a Mg dichloride in active form.

14. (Previously amended) The catalyst component according to claim 13 in which the titanium compound is  $TiCl_4$  or  $TiCl_3$ .

15. (Previously amended) The catalyst component according to claim 1 further comprising an additional electron donor compound in addition to the succinate of formula (I).

16. (Previously amended) The catalyst component according to claim 15 in which the additional electron donor compound is selected from the group consisting of ethers, esters of organic mono or dicarboxylic acids and amines.

17. (Previously amended) The catalyst component according to claim 16 in which the additional electron donor compound is selected from the group consisting of (i) 1,3-propanediethers of formula (II);

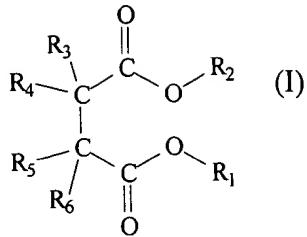


wherein  $R^I$ ,  $R^{II}$ ,  $R^{III}$ ,  $R^{IV}$ ,  $R^V$  and  $R^{VI}$ , equal or different from each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and  $R^{VII}$  and  $R^{VIII}$ , equal or different from each other, have the same meaning of  $R^I-R^{VI}$  except that they cannot be hydrogen; and wherein one or more of the  $R^I-R^{VIII}$  groups can be linked to form a cycle and (ii) esters of organic mono or dicarboxylic acids.

18. (Previously amended) The catalyst component according to claim 17 in which the additional electron donor compound is selected from the group consisting of phthalates and the 1,3-diethers of formula (II) in which  $R^{VII}$  and  $R^{VIII}$  are selected from  $C_1-C_4$  alkyl radicals,  $R^{III}$  and  $R^{IV}$  form a condensed unsaturated cycle and  $R^I$ ,  $R^{II}$ ,  $R^V$  and  $R^{VI}$  are hydrogen.

19. (Currently amended) A catalyst for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising the product of the reaction between:

(a) a solid catalyst component for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising Mg, Ti, halogen and an electron donor selected from succinates of formula (I):



Cont'd  
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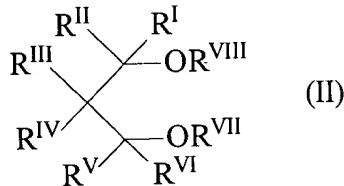
wherein the radicals  $\text{R}_1$  and  $\text{R}_2$ , equal to or different from each other, are a  $\text{C}_1\text{-C}_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals  $\text{R}_3$  to  $\text{R}_6$  equal to or different from each other, are hydrogen or a  $\text{C}_1\text{-C}_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, aryalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals  $\text{R}_3$  to  $\text{R}_6$  which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when  $\text{R}_3$  to  $\text{R}_5$  are contemporaneously hydrogen,  $\text{R}_6$  is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, aryalkyl and alkylaryl groups having from 3 to 20 carbon atoms;

- (b) an alkylaluminum compound and, optionally,
- (c) one or more external electron donor compounds.

20. (Previously amended) The catalyst according to claim 19 in which the alkylaluminum compound (b) is a trialkyl aluminum compound.

21. (Previously amended) The catalyst according to claim 20 in which the trialkylaluminum compound is selected from the group consisting of triethylaluminum, triisobutylaluminum, tri-n-butylaluminum, tri-n-hexylaluminum, and tri-n-octylaluminum.

22. (Previously amended) The catalyst according to claim 19 in which the external donor (c) is selected from the 1,3-diethers of the general formula (II):



wherein  $\text{R}^{\text{I}}$ ,  $\text{R}^{\text{II}}$ ,  $\text{R}^{\text{III}}$ ,  $\text{R}^{\text{IV}}$ ,  $\text{R}^{\text{V}}$  and  $\text{R}^{\text{VI}}$ , equal or different from each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and  $\text{R}^{\text{VII}}$  and  $\text{R}^{\text{VIII}}$ , equal or different from each other, have the same meaning of  $\text{R}^{\text{I}}\text{-R}^{\text{VI}}$  except that they cannot be hydrogen; and

wherein one or more of the  $R^1$ - $R^{VIII}$  groups can be linked to form a cycle.

23. (Previously amended) The catalyst according to claim 22 in which the 1,3-diethers are selected from those in which  $R^{VII}$  and  $R^{VIII}$  are selected from  $C_1$ - $C_4$  alkyl radicals,  $R^{III}$  and  $R^{IV}$  form a condensed unsaturated cycle and  $R^1$ ,  $R^{II}$ ,  $R^V$  and  $R^{VI}$  are hydrogen.

24. (Previously amended) The catalyst according to claim 23 in which the diether of formula (II) is 9,9-bis(methoxymethyl)fluorene.

25. (Previously amended) The catalyst according to claim 19 in which the external donor (c) is a silicon compound of the formula  $R_a^7 R_b^8 Si(OR^9)_c$ , wherein a and b are integers from 0 to 2, c is an integer from 1 to 4 and the sum (a+b+c) is 4, and  $R^7$ ,  $R^8$  and  $R^9$  are  $C_1$ - $C_{18}$  hydrocarbon groups optionally containing heteroatoms.

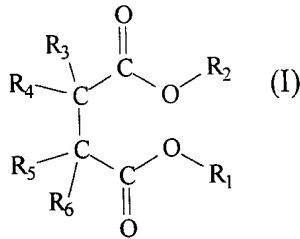
26. (Previously amended) The catalyst according to claim 25 in which a is 1, b is 1 and c is 2.

27. (Previously amended) The catalyst according to claim 25 in which  $R^7$  and/or  $R^8$  are branched alkyl, cycloalkyl or aryl groups with 3-10 carbon atoms optionally containing heteroatoms and  $R^9$  is a  $C_1$ - $C_{10}$  alkyl group.

28. (Previously amended) The catalyst according to claim 25 in which a is 0, c is 3 and  $R^8$  is a branched alkyl or cycloalkyl group and  $R^9$  is methyl.

29. (Currently amended) A catalyst for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising the product of the reaction between:

- a solid catalyst component comprising Mg, Ti, halogen and an internal electron donor (d);
- an alkylaluminum compound and,
- a succinate of formula (I):



wherein the radicals  $R_1$  and  $R_2$ , equal to or different from each other, are a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals  $R_3$  to  $R_6$  equal to or different from each other, are hydrogen or a  $C_1$ -

*C6*  
*B1*

*33*

*C<sub>20</sub>* linear or branched alkyl, alkenyl, cycloalkyl, aryl, aryalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals R<sub>3</sub> to R<sub>6</sub> which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when R<sub>3</sub> to R<sub>5</sub> are contemporaneously hydrogen, R<sub>6</sub> is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, aryalkyl and alkylaryl groups having from 3 to 20 carbon atoms.

*32*

*30*

(Currently amended) The catalyst according to claim *29* in which the succinate of formula (I) is selected from those in which at least two radicals from R<sub>3</sub> to R<sub>6</sub> are different from hydrogen and are selected from C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl, alkenyl, cycloalkyl, aryl, aryalkyl or alkylaryl groups optionally containing heteroatoms.

*33*

*34*  
*31*

(Previously amended) The catalyst according to claim *30* in which the two radicals different from hydrogen are linked to different carbon atoms.

*32*

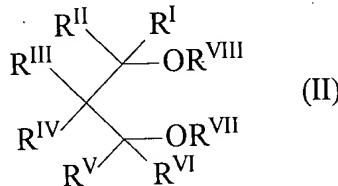
*35*  
*32*

(Previously amended) The catalyst according to claim *29* in which the internal donor (d) is selected from the group consisting of ethers, esters of organic mono or ~~bi~~carboxylic acids and amines.

*35*

*36*  
*33*

(Previously amended) The catalyst according to claim *32* in which the internal donor (d) is selected from the group consisting of (i) 1,3-propanediethers of formula (II):



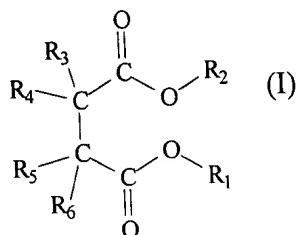
wherein R<sup>I</sup>, R<sup>II</sup>, R<sup>III</sup>, R<sup>IV</sup>, R<sup>V</sup> and R<sup>VI</sup>, equal or different from each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and R<sup>VII</sup> and R<sup>VIII</sup>, equal or different from each other, have the same meaning of R<sup>I</sup>-R<sup>VI</sup> except that they cannot be hydrogen; one or more of the R<sup>I</sup>-R<sup>VIII</sup> groups can be linked to form a cycle and (ii) esters of organic mono or bicarboxylic acids.

*36*

*34*  
*31*

(Previously amended) The catalyst according to claim *33* in which the internal donor (d) is selected from the group consisting of phthalates and the 1,3-diethers of formula (II) in which R<sup>VII</sup> and R<sup>VIII</sup> are selected from C<sub>1</sub>-C<sub>4</sub> alkyl radicals, R<sup>III</sup> and R<sup>IV</sup> form a condensed unsaturated cycle and R<sup>I</sup>, R<sup>II</sup>, R<sup>V</sup> and R<sup>VI</sup> are hydrogen.

39/35. (Currently amended) A prepolymerized catalyst component for the polymerization of olefins  $\text{CH}_2=\text{CHR}$ , wherein R is hydrogen or a  $\text{C}_1\text{-C}_{12}$  alkyl group, wherein the prepolymerized catalyst component comprises a solid for the polymerization of olefins  $\text{CH}_2=\text{CHR}$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising Mg, Ti, halogen and an electron donor selected from succinates of formula (I):



wherein the radicals  $\text{R}_1$  and  $\text{R}_2$ , equal to or different from each other, are a  $\text{C}_1\text{-C}_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals  $\text{R}_3$  to  $\text{R}_6$  equal to or different from each other, are hydrogen or a  $\text{C}_1\text{-C}_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, aryalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals  $\text{R}_3$  to  $\text{R}_6$  which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when  $\text{R}_3$  to  $\text{R}_5$  are contemporaneously hydrogen,  $\text{R}_6$  is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, aryalkyl and alkylaryl groups having from 3 to 20 carbon atoms and which solid for the polymerization of olefins  $\text{CH}_2=\text{CHR}$  has been prepolymerized with an olefin to such an extent that the amount of the olefin pre-polymer is from 0.2 to 500 g per g of solid catalyst component.

40/36. (Previously amended) The prepolymerized catalyst according to claim 35 in which the solid catalyst component has been prepolymerized with ethylene or propylene.

39/37. (Previously amended) A process for the (co)polymerization of olefins  $\text{CH}_2=\text{CHR}$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of the catalyst of claim 19.

39/38. (Previously amended) The process according to claim 37 in which the olefin to be (co)polymerized is selected from the group consisting of ethene, propene, 1-butene, 4-methyl-1-pentene and 1-hexene.

39-40. (cancelled).

*B14*

31. (Previously added) The catalyst according to claim 27 wherein R<sup>9</sup> is a methyl group.

32. (Previously added) A process for the (co)polymerization of olefins CH<sub>2</sub>=CHR, in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of the catalyst of claim 31.

33. (Previously added) A process for the (co)polymerization of olefins CH<sub>2</sub>=CHR, in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of the catalyst of claim 35.

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